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AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Cancel claims 28, 29, 37 and 38 without prejudice.

- 1. (Original) A gene targeting construct, comprising a transgene encoding a polypeptide comprising a rod outer segment (ROS) targeting signal, said transgene flanked by 5' and 3' DNA sequences which are homologous to the mouse rhodopsin gene, wherein homologous recombination between said construct and a mouse rhodopsin gene results in operable association between said transgene and a rod-specific regulatory sequence.
- 2. (Original) The construct of claim 1, wherein said polypeptide is a G protein-coupled receptor (GPCR).
 - 3. (Original) The construct of claim 2, wherein said GPCR is a cannabinoid receptor.
 - 4. (Original) The construct of claim 1, wherein said polypeptide is a fusion protein.
- 5. (Original) The construct of claim 1, wherein said ROS targeting signal comprises SEQ ID NO:4.
 - 6. (Original) The construct of claim 1, further comprising a positive selection marker.
- 7. (Original) The construct of claim 6, wherein said positive selection marker is a neomycin resistance gene.
- 8. (Original) The construct of claim 6, wherein said positive selection marker is flanked by loxP sites.
 - 9. (Original) The construct of claim 1, further comprising a negative selection marker.
- 10. (Original) The construct of claim 9, wherein said negative selection marker is a diphtheria toxin A fragment gene.
- 11. (Original) The construct of claim 1, wherein said rod-specific regulatory sequence comprises a rhodopsin promoter.
- 12. (Original) The construct of claim 1, wherein the 5' flanking DNA sequence comprises a mouse rhodopsin promoter.
- 13. (Original) The construct of claim 1, wherein the 3' flanking sequence comprises a portion of exon 1 of mouse rhodopsin.

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- 14. (Original) The construct of claim 1, wherein the 3' flanking sequence comprises exon 2 of mouse rhodopsin.
 - 15. (Original) A vector comprising the construct of claim1.
 - 16. (Original) A cell comprising the construct of claim1.
 - 17. (Original) A mouse cell whose genome comprises:
 - (a) a functional disruption of one or both endogenous rhodopsin gene alleles, and
- (b) a transgene encoding a polypeptide comprising a ROS targeting signal operably associated with a rod-specific regulatory sequence, wherein said polypeptide is not a rhodopsin.
 - 18. (Original) The cell of claim 17, wherein said polypeptide is a GPCR.
 - 19. (Original) The cell of claim 18, wherein said GPCR is a cannabinoid receptor.
 - 20. (Original) The cell of claim 17, wherein said polypeptide is a fusion protein.
- 21. (Original) The cell of claim 17, wherein said ROS targeting signal comprises SEQ ID NO:4.
- 22. (Original) The cell of claim 17, wherein said genome comprises a functional disruption of both endogenous rhodopsin gene alleles.
- 23. (Original) The cell of claim 17, wherein said transgene is inserted into one or both endogenous rhodopsin gene alleles.
 - 24. (Original) The cell of claim 17, which is an embryonic stem cell.
 - 25. (Original) The cell of claim 17, which is in a mouse.
 - 26. (Original) The cell of claim 17, which is isolated from a mouse.
 - 27. (Original) The cell of claim 26, which is a rod cell.
 - 28. (cancelled)
 - 29. (cancelled)
 - 30. (Original) A mouse whose genome comprises:
 - (a) a functional disruption of one or both endogenous rhodopsin gene alleles, and

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- (b) a transgene encoding a polypeptide comprising a ROS targeting signal operably associated with a rod-specific regulatory sequence, wherein said polypeptide is not a rhodopsin.
 - 31. (Original) The mouse of claim 30, wherein said polypeptide is a GPCR.
 - 32. (Original) The mouse of claim 31, wherein said GPCR is a cannabinoid receptor.
 - 33. (Original) The mouse of claim 30, wherein said polypeptide is a fusion protein.
- 34. (Original) The mouse of claim 30, wherein said ROS targeting signal comprises SEQ ID NO:4.
- 35. (Original) The mouse of claim 30, wherein said genome comprises a functional disruption of both endogenous rhodopsin gene alleles.
- 36. (Original) The mouse of claim 30, wherein said transgene is inserted into one or both endogenous rhodopsin gene alleles.
 - 37. (cancelled)
 - 38. (cancelled)